03050105-170

(Pacolet River)

General Description

Watershed 03050105-170 extends through Spartanburg and Cherokee Counties and consists primarily of the *Pacolet River* and its tributaries from its origin at the confluence of the North and South Pacolet Rivers to Lawsons Fork Creek. The watershed occupies 73,661 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Pacolet series. The erodibility of the soil (K) averages 0.28, and the slope of the terrain averages 11%, with a range of 2-45%. Land use/land cover in the watershed includes: 51.3% forested land, 28.7% agricultural land,14.5% urban land, 3.3% scrub/shrub land, 1.6% water, and 0.6% barren land.

The Pacolet River is formed by the confluence of the North Pacolet River Watershed and the South Pacolet River Watershed. Downstream from the confluence, the Pacolet River accepts drainage from Thompson Creek and forms Lake Blalock (760 acres). Streams draining into Lake Blalock include Buck Creek, Little Buck Creek (Ezell Branch, Cudds Creek, Greenes Lake), and Casey Creek (Carlisle Branch). Downstream from the lake, the Pacolet River accepts drainage from Cherokee Creek (Little Cherokee Creek), Island Creek (Zekial Creek, Double Branch), Pole Bridge Branch, Peters Creek, Cinder Branch, Turkey Hen Branch, Quinn Branch, and Mill Branch. There are numerous lakes and ponds (totaling 978.8 acres) in this watershed and a total of 102.6 stream miles, all classified FW. Cowpens National Battlefield Site is located between Island Creek and Zekial Creek.

Water Quality

Station #	Type	Class	Description
B-028	S	FW	PACOLET R. AT S-42-55, BELOW CONFL. OF N. & S. PACOLET RIVERS
B-783	BIO	FW	BUCK CREEK AT PEACH SHED RD
B-259	S	FW	LITTLE BUCK CREEK AT COUNTY ROAD, 2.3 MI SW OF CHESNEE
B-347	W	FW	LAKE BLALOCK IN FOREBAY NEAR DAM
B-163A	S	FW	PACOLET RIVER AT BRIDGE ON S-42-737, 2.9 MI NW OF COWPENS
B-191	S	FW	POTTER BRANCH ON ROAD 30, BELOW OUTFALL FROM HOUSING PROJECT
B-331	W	FW	PACOLET RIVER AT S-42-59, BEACON LIGHT ROAD IN CLIFTON

Pacolet River - There are three monitoring sites along this section of the Pacolet River. Aquatic life uses are fully supported at the upstream site (**B-028**), and significant decreasing trends in five-day biochemical oxygen demand, total phosphorus concentration, and total suspended solids concentration suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. Aquatic life and recreational uses are fully supported further downstream (**B-163A**); however, there is a significant increasing trend in total phosphorus concentration. There is a significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. At the downstream site (**B-331**), aquatic life uses are fully supported, and recreational uses are partially supported due to fecal coliform bacteria excursions.

Buck Creek (B-783) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Little Buck Creek (B-259) - Aquatic life uses are fully supported. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions.

Lake Taylor Blalock (B-347) - Lake Blalock in Spartanburg County is a 760-acre impoundment on the Pacolet River, with a maximum depth of approximately 49.5 feet (15 m) and an average depth of 5.6 feet (1.7 m). Lake Blalock's watershed comprises 273 square miles (707 km2), which includes Spartanburg Reservoir #1 and Lake Bowen, and extends into North Carolina. Aquatic life and recreational uses are fully supported.

Potter Branch (B-191) - Aquatic life uses are fully supported. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions.

NPDES Program

Active NPDES Facilities

PROPOSED

RECEIVING STREAM
FACILITY NAME
PERMITTED FLOW @ PIPE (MGD)
COMMENT

NPDES#
TYPE
LIMITATION

PACOLET RIVER SC0042668 SSSD/CLIFTON WWTP MINOR DOMESTIC PIPE #: 001 FLOW: 0.29 EFFLUENT

PACOLET RIVER
ARTEVA SPECIALTIES SARL
SC0002798
MAJOR INDUS

ARTEVA SPECIALTIES SARL
PIPE #: 002 FLOW: 0.800 EFFLUENT
PIPE #: 004 FLOW: 0.061 EFFLUENT
PIPE #: 010 FLOW: 0.216 WATER QUALITY
WQL FOR DO,TRC

PACOLET RIVER
SSSD/TOWN OF COWPENS/PACOLET RIVER
PIPE #: 001 FLOW: 1.5
WATER QUALITY

PIPE #: 001 FLOW: 1.5 WATER QUALITY
WQL FOR TRC

PACOLET RIVER SC0020435 SSSD/FAIRFOREST REGIONAL WWTF MAJOR DOMESTIC PIPE #: 001 FLOW: 30.0 WQL FOR TRC, NH3N

PACOLET RIVER TRIBUTARY

OMEGA CHEMICALS, INC.

MINOR INDUSTRIAL

PIPE #: 001 FLOW: 1.12 EFFLUENT

CHEROKEE CREEK SCG250176

SAXONIA-FRANKE OF AMERICA, INC. MINOR INDUSTRIAL

PIPE #: 001 FLOW: 0.003 **EFFLUENT**

CHEROKEE CREEK SC0002798

ARTEVA SPECIALTIES SARL MAJOR INDUSTRIAL

PIPE #: 001 FLOW: 0.08 **EFFLUENT**

LITTLE CHEROKEE CREEK SCG645010

SPARTANBURG/LAKE BLALOCK WTP MINOR DOMESTIC

PIPE #: 001 FLOW: M/R **EFFLUENT**

LITTLE BUCK CREEK SC0025763

CITY OF CHESNEE/MAIN PLANT WWTP MINOR DOMESTIC WATER QUALITY

PIPE #: 001 FLOW: 0.500

WOL FOR NH3N

PETERS CREEK SC0036102

RR DONNELLEY & SONS CO. MINOR INDUSTRIAL PIPE #: 001 FLOW: 0.1202 WATER QUALITY

WQL FOR TRC; NH3N IN SUMMER & WINTER

PETERS CREEK SC0037826

SPECIALTY INDUSTRIAL PRODUCTS MINOR INDUSTRIAL PIPE #: 001 FLOW: 0.0097 WATER QUALITY

WQL FOR TRC

PETERS CREEK SC0030554

SSSD IDLEWOOD SD MINOR DOMESTIC PIPE #: 001 FLOW: 0.08 WATER QUALITY

WQL FOR TRC,NH3N

PETERS CREEK TRIBUTARY SCG250046

AIR LIQUIDE AMERICA CORP. MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R **EFFLUENT**

ISLAND CREEK SC0031577

TALL TALES FISH CAMP MINOR DOMESTIC

PIPE #: 001 FLOW: 0.0136 **EFFLUENT**

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME PERMIT# **FACILITY TYPE STATUS**

IRENE BISHOP 422904-1301

SHORT TERM C&D LANDFILL

DAVID STOLTZ 422422-1301

SHORT TERM C&D LANDFILL

HASKELL SEXTON 422484-1301

SHORT TERM C&D LANDFILL

J. DAVID MOORE INERT IND. LANDFILL IWP-224
INDUSTRIAL ------

J DAVID MOORE INERT IND. LANDFILL CWP-047
CONSTRUCTION -------

HOECHST CELANESE C&D LANDFILL 423312-1201 (SCD056811367)

INDUSTRIAL C&D LANDFILL ------

Land Application Sites

 LAND APPLICATION SYSTEM
 ND#

 FACILITY NAME
 TYPE

SPRAYFIELD ND0074101 SPARTANBURG WATER SYSTEM/SIMMS WTP DOMESTIC

SPRAYFIELD ND0077135 SPARTANBURG WATER SYSTEM/LAKE BLALOCK WTP DOMESTIC

Mining Activities

MINING COMPANY PERMIT #
MINE NAME MINERAL

CHAPMAN GRADING & CONCRETE CO., INC. 1081-83 CHAPMAN SAND PLANT #6 SAND

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the City of Chesnee, the Town of Mayo, and portions of the City of Spartanburg and the Town of Cowpens. In addition to Spartanburg area in the lower region of the watershed, growth is associated primarily with Chesnee and Cowpens, both having sewer infrastructure. Industrial growth in particular is expected along the I-85 corridor and major roads with I-85 interchanges.